

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P965088

Luminaire Tested: **NAV-SB3D-735-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965088
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-735-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31021.6 lumens
Efficiency: N/A
Efficacy: 142.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B4 - U0 - G5

Input Watts (W): 218.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



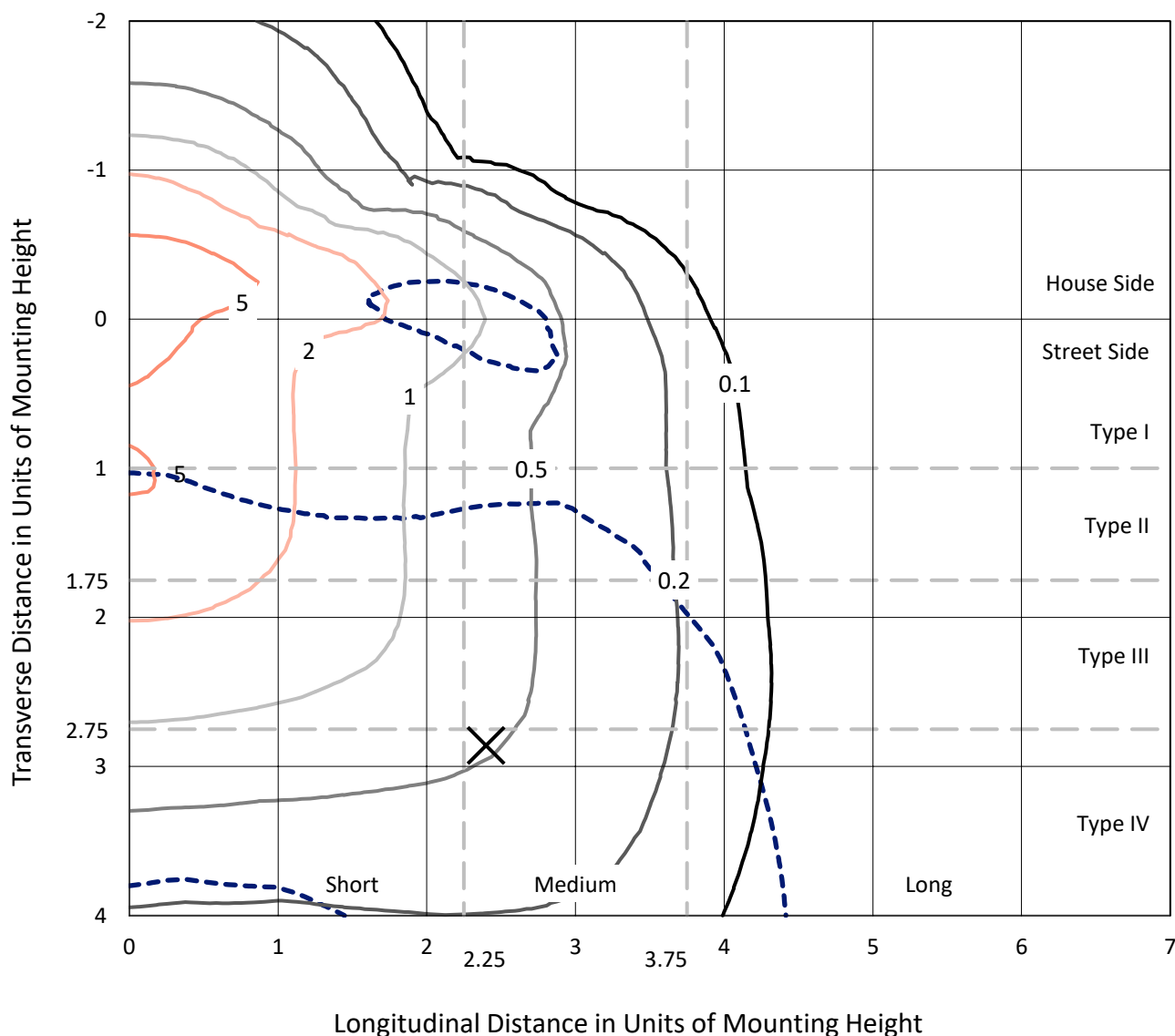
REPORT NUMBER: P965088

CATALOG NUMBER: NAV-SB3D-735-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

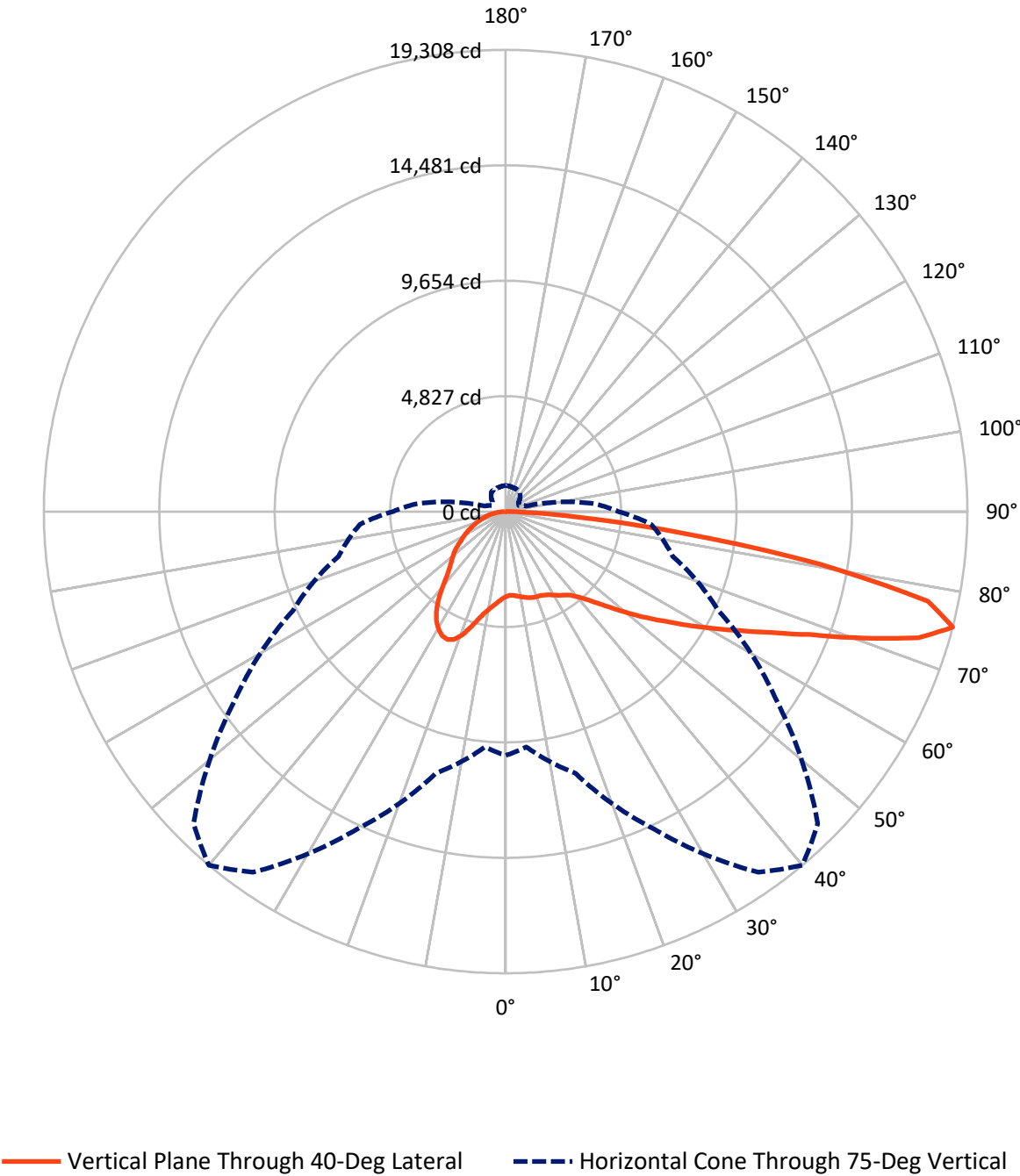
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc
 Type IV - Medium - N/A

REPORT NUMBER: P965088
CATALOG NUMBER: NAV-SB3D-735-U-SL4

Luminous Intensity Polar Plot



REPORT NUMBER: P965088

CATALOG NUMBER: NAV-SB3D-735-U-SL4

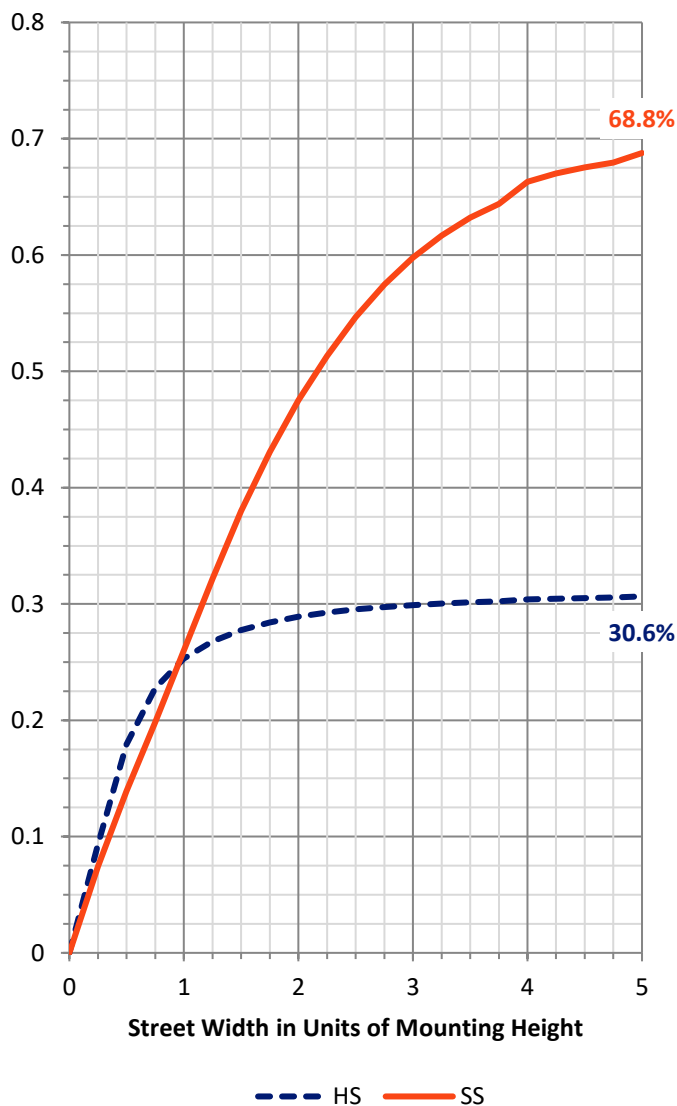
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9611.5	0.0	9611.5
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	21410.1	0.0	21410.1
	% Fixture	69.0	0.0	69.0
Total	Lumens	31021.6	0.0	31021.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	354.1	1.1
10°-20°	1188.9	3.8
20°-30°	2170.8	7.0
30°-40°	3078.7	9.9
40°-50°	4157.2	13.4
50°-60°	5592.6	18.0
60°-70°	7098.2	22.9
70°-80°	6442.1	20.8
80°-90°	939.1	3.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	31021.6	100.0
0°-180°	31021.6	100.0

Coefficient of Utilization



REPORT NUMBER: P965088

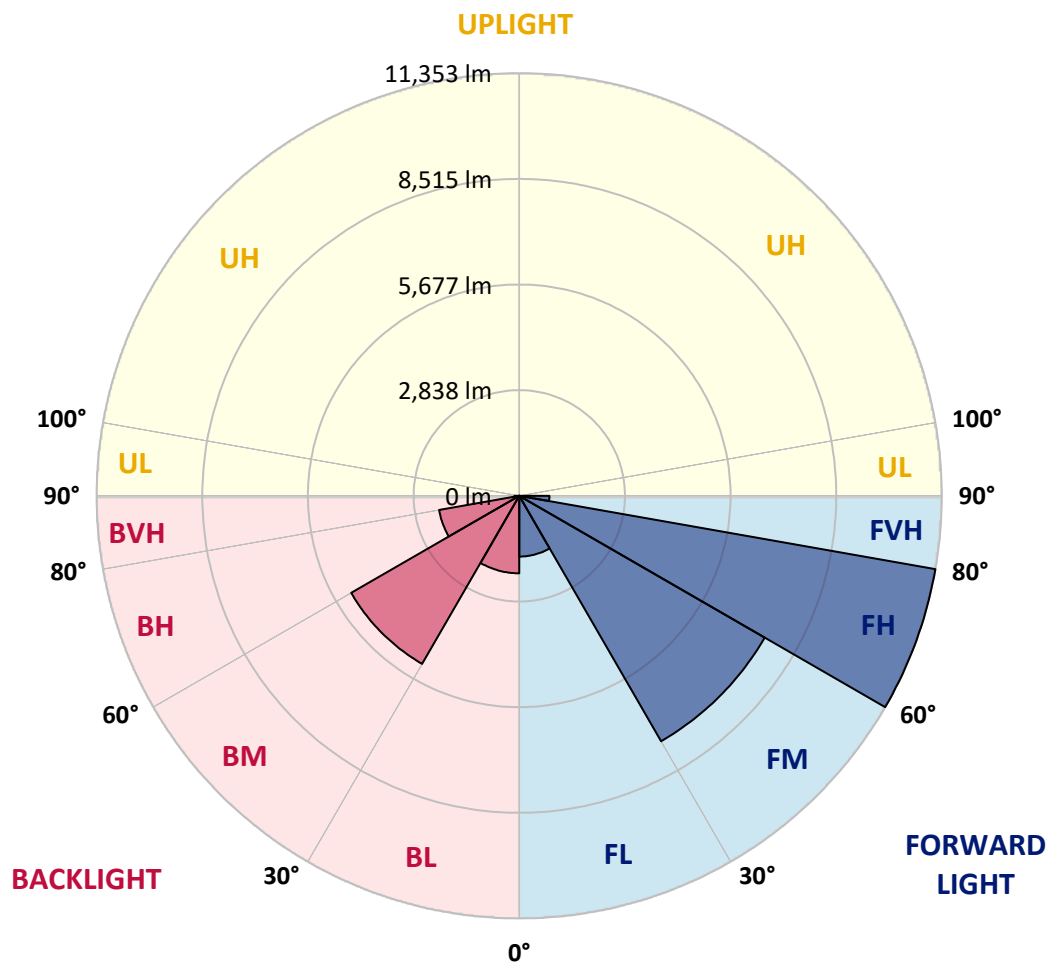
CATALOG NUMBER: NAV-SB3D-735-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1631.8	5.3			
FM	(30°-60°)	7615.1	24.5			
FH	(60°-80°)	11353.4	36.6			G4/12000
FVH	(80°-90°)	809.8	2.6			G5
BL	(0°-30°)	2081.9	6.7	B3/2500		
BM	(30°-60°)	5213.4	16.8	B4/8500		
BH	(60°-80°)	2186.9	7.0	B3/2500		G3/2500
BVH	(80°-90°)	129.3	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Medium



REPORT NUMBER: P965088

CATALOG NUMBER: NAV-SB3D-735-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3547.3	3547.3	3547.3	3547.3	3547.3	3547.3	3547.3	3547.3	3547.3	3547.3	3547.3
2.5°	3493.1	3512.8	3507.9	3501.3	3501.3	3502.9	3501.3	3512.8	3524.4	3535.8	3554.0
5°	3529.3	3549.0	3539.1	3530.9	3524.4	3522.7	3517.7	3516.1	3522.7	3537.5	3562.2
7.5°	3600.0	3619.8	3604.9	3590.2	3576.9	3570.4	3563.8	3554.0	3549.0	3557.3	3591.8
10°	3679.0	3698.7	3680.7	3654.3	3632.9	3624.7	3618.1	3608.2	3601.6	3606.6	3644.5
12.5°	3758.0	3777.7	3753.0	3716.9	3688.9	3684.0	3675.6	3672.4	3670.7	3669.1	3706.9
15°	3832.0	3848.5	3817.2	3774.5	3744.8	3736.5	3728.3	3733.3	3741.6	3751.4	3794.1
17.5°	3889.6	3906.1	3859.9	3804.1	3776.1	3772.8	3767.8	3784.3	3807.4	3832.0	3884.6
20°	3942.3	3958.7	3899.5	3823.8	3790.9	3790.9	3792.5	3827.0	3859.9	3896.1	3968.6
22.5°	4016.3	4029.5	3957.0	3853.4	3805.7	3809.0	3822.1	3856.7	3897.9	3947.2	4047.5
25°	4126.5	4136.4	4047.5	3909.3	3855.0	3864.9	3876.4	3892.8	3932.4	3989.9	4124.9
27.5°	4304.2	4312.5	4195.6	4008.1	3925.7	3942.3	3958.7	3947.2	3965.3	4014.6	4187.4
30°	4554.3	4559.3	4411.2	4162.7	4045.9	4054.1	4057.5	4009.7	3975.2	4014.6	4231.8
32.5°	4850.5	4848.9	4672.8	4350.3	4182.5	4174.2	4146.2	4052.4	3971.9	4006.4	4271.3
35°	5309.5	5291.5	5064.4	4613.5	4337.1	4286.1	4220.3	4100.2	3988.3	3998.2	4305.8
37.5°	6069.6	6013.8	5699.5	5044.6	4567.5	4437.5	4340.5	4177.5	4024.6	3994.9	4347.0
40°	6927.0	6856.1	6510.6	5635.3	4913.0	4704.0	4547.7	4287.8	4083.7	4009.7	4407.9
42.5°	7943.7	7843.4	7471.5	6331.3	5350.7	5047.9	4812.7	4427.6	4170.9	4057.5	4490.1
45°	9192.5	9059.3	8532.7	7116.2	5901.8	5498.7	5184.4	4639.9	4304.2	4149.6	4613.5
47.5°	10454.5	10487.4	9738.8	8014.5	6563.3	6054.9	5650.1	4959.1	4498.4	4297.6	4812.7
50°	11795.5	11818.6	10938.3	9010.0	7313.6	6683.4	6173.4	5316.1	4768.2	4508.3	5110.4
52.5°	12841.9	12845.2	12027.5	10051.5	8095.1	7374.5	6737.7	5724.1	5080.8	4788.0	5507.0
55°	13496.8	13488.6	12790.9	11037.0	8993.5	8100.1	7362.9	6188.1	5462.5	5117.0	6005.5
57.5°	13972.3	13947.6	13317.4	11884.4	9951.0	8957.3	8070.4	6714.7	5913.3	5508.7	6662.0
60°	14153.3	14138.4	13674.4	12616.5	10958.0	9905.0	8886.5	7303.6	6425.1	5970.9	7506.1
62.5°	14222.4	14250.4	14025.0	13325.6	12035.7	10954.7	9783.2	8007.9	7001.0	6494.2	8396.2
65°	14465.8	14516.9	14470.8	14253.6	13253.2	12183.8	10972.8	8845.3	7629.5	7055.3	9325.9
67.5°	14948.0	14998.9	15018.7	15364.2	14740.6	13715.6	12456.9	9888.5	8364.9	7637.7	10025.1
70°	14936.4	14921.6	15270.4	16247.8	16603.2	15836.5	14457.6	11171.9	9241.9	8121.4	10114.0
72.5°	13595.5	13477.0	14301.3	16237.9	18153.1	18051.1	16901.0	12827.2	9998.8	8180.6	8776.3
75°	10199.5	9883.6	11339.7	14633.7	18411.5	19308.1	18454.2	13853.8	9819.4	7228.0	6107.6
77.5°	4361.8	4044.2	5760.4	10832.9	16478.1	18049.4	17029.4	12086.7	7838.4	4779.7	2999.5
80°	1141.8	1140.2	1740.8	4911.4	11206.4	13328.9	11693.5	7805.5	4478.6	1707.9	827.6
82.5°	472.2	460.7	640.0	1910.3	5475.8	7479.7	6104.2	3481.5	1617.3	462.4	274.8
85°	176.1	174.5	311.0	659.8	1931.6	3085.0	2232.8	890.1	403.1	225.4	123.4
87.5°	49.4	47.8	67.4	228.7	470.6	714.1	381.7	146.5	113.6	88.9	36.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P965088

CATALOG NUMBER: NAV-SB3D-735-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3547.3	3547.3	3547.3	3547.3	3547.3	3547.3	3547.3	3547.3	3547.3	3547.3	3547.3
2.5°	3558.9	3567.1	3582.0	3593.4	3608.2	3624.7	3647.8	3662.5	3677.4	3687.2	3680.7
5°	3573.7	3591.8	3629.6	3667.4	3711.9	3753.0	3800.7	3835.3	3863.2	3871.5	3874.8
7.5°	3606.6	3636.2	3700.4	3764.5	3835.3	3902.8	3971.9	4031.1	4078.8	4096.9	4098.6
10°	3664.2	3703.6	3794.1	3884.6	3978.4	4082.1	4170.9	4256.5	4324.0	4351.9	4353.6
12.5°	3736.5	3785.9	3904.4	4029.5	4159.4	4302.5	4417.8	4523.0	4607.0	4644.8	4644.8
15°	3830.3	3894.5	4045.9	4213.8	4404.6	4603.7	4750.2	4866.9	4960.7	5006.8	5003.5
17.5°	3932.4	4017.9	4208.8	4462.1	4735.3	4996.9	5168.0	5253.6	5350.7	5395.1	5393.4
20°	4031.1	4136.4	4409.5	4778.0	5141.7	5419.8	5558.0	5581.0	5587.6	5592.5	5605.7
22.5°	4133.1	4274.6	4661.3	5176.2	5566.2	5758.8	5778.4	5679.7	5541.6	5477.4	5495.4
25°	4245.0	4432.5	4990.3	5615.6	5931.5	5954.5	5803.1	5562.9	5301.3	5181.2	5199.3
27.5°	4353.6	4615.2	5385.2	6035.1	6194.7	5992.4	5666.6	5326.0	5010.1	4883.4	4898.2
30°	4462.1	4824.2	5821.2	6402.0	6314.8	5898.6	5451.1	5071.0	4753.4	4620.1	4634.9
32.5°	4572.4	5067.7	6323.0	6666.9	6293.4	5699.5	5182.8	4784.7	4505.0	4365.1	4383.2
35°	4697.5	5367.1	6798.5	6811.7	6150.3	5406.6	4829.1	4442.5	4198.9	4087.1	4111.7
37.5°	4860.3	5747.2	7218.2	6847.9	5900.2	4977.2	4389.8	4037.7	3837.0	3785.9	3822.1
40°	5062.7	6204.6	7539.0	6790.3	5530.0	4455.6	3909.3	3628.0	3514.4	3526.0	3565.5
42.5°	5326.0	6716.3	7764.4	6642.3	5015.0	3917.6	3488.2	3363.1	3417.4	3463.5	3506.2
45°	5668.2	7247.8	7904.3	6390.6	4432.5	3461.8	3239.7	3269.3	3310.4	3315.4	3348.3
47.5°	6105.9	7785.8	7996.3	6010.4	3838.6	3141.0	3081.8	3088.3	3080.1	3045.6	3071.8
50°	6652.1	8309.0	8078.6	5507.0	3333.5	2940.2	2861.3	2838.2	2724.7	2612.8	2627.6
52.5°	7274.1	8789.5	8113.2	4881.8	2940.2	2772.4	2644.1	2499.3	2287.0	2252.4	2264.0
55°	7965.1	9233.7	8024.3	4113.3	2609.5	2556.9	2362.7	2188.3	2165.3	2135.7	2140.6
57.5°	8791.1	9712.5	7843.4	3256.1	2270.6	2305.1	2115.9	2135.7	2094.5	2048.5	2040.3
60°	9694.3	10207.8	7525.9	2474.6	1920.1	1990.9	2051.7	2050.1	2038.6	2000.7	1987.6
62.5°	10507.2	10533.5	6900.6	1895.4	1612.4	1747.3	1913.6	1911.9	1902.0	1880.7	1872.4
65°	10990.9	10484.1	5857.5	1492.3	1359.0	1546.6	1726.0	1739.1	1740.8	1739.1	1739.1
67.5°	10905.4	9906.6	4426.0	1188.0	1150.0	1342.6	1540.1	1558.1	1571.3	1574.6	1577.9
70°	9937.9	8638.1	2885.9	947.7	964.2	1163.3	1364.0	1382.1	1393.6	1406.8	1413.4
72.5°	7746.3	6351.0	1651.9	766.7	801.2	1008.6	1189.6	1210.9	1217.6	1242.2	1252.1
75°	4720.5	3734.9	891.7	603.8	658.2	862.1	1016.8	1041.5	1053.0	1082.6	1085.9
77.5°	2244.2	1617.3	508.4	470.6	529.8	704.2	858.8	886.8	855.6	872.1	858.8
80°	758.5	600.5	320.8	358.6	404.8	549.5	687.8	715.8	650.0	646.6	640.0
82.5°	264.9	243.5	204.0	238.6	261.6	393.2	519.9	556.2	483.7	482.1	459.1
85°	103.6	98.7	113.6	130.0	156.3	241.9	342.2	360.3	297.8	240.3	237.0
87.5°	21.4	23.1	28.0	29.6	47.8	83.9	123.4	151.4	120.1	102.0	93.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)